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How we feel matters at work: new research shows first causal link between wellbeing and productivity

- One-point increase in self-reported happiness led to around a 12% increase in productivity, on average, among call centre workers
- Six-month study of 1,793 workers at British Telecom (BT) call centres across the UK
- Wellbeing scientists used observations of British weather to track its impact on mood as well as detailed indicators of worker performance

Researchers have demonstrated a causal link between worker happiness and productivity in the first large-scale field study of its kind.

Their findings, published in the journal *Management Science*, serve as the clearest real-world evidence of wellbeing's impact on worker performance to date.

The study of almost 1,800 BT call centre workers shows that a one-point increase in happiness (on a scale of 0 to 10) was associated with a 12% increase in their productivity, as measured by weekly sales data.

Co-author Jan-Emmanuel De Neve, Director of the [Wellbeing Research Centre](#) at the University of Oxford and a Professor of Economics and Behavioural Science at the Saïd Business School, said:

"There is no question that caring for how employees feel at work is the right thing to do. Both the moral and business cases are now settled, especially given our most recent field research showing that employee wellbeing drives productivity as well as recruitment and retention of talent which, in turn, has measurable impact on a company's overall financial performance."

Researchers from Erasmus University Rotterdam, the University of Oxford, and MIT, observed workers from 11 UK call centres over six months in 2017 and 2018.

They used a well-established mechanism for measuring subjective wellbeing in the form of a weekly one-question survey emailed to workers, asking them to rate their happiness for the last week on a five-point scale¹.

These scores were then anonymously mapped to workers' individual performance for the same period, which showed a positive correlation between happiness and productivity. The results build on previous research showing mood effects in laboratory settings², and demonstrate that happiness has an impact on productivity when it comes to workers, tasks, and jobs in the real world.

The effect of happiness differed across tasks. Simple 'order taking' calls were less impacted by a worker's mood, whereas more complex tasks – like negotiating, selling bundles of products, and re-contracting – saw productivity increases closer to 20%, on average, per one-point improvement in happiness.

Co-author George Ward, a Research Fellow in Economics at the University of Oxford and recent graduate of the MIT Sloan School of Management, added:

“The findings suggest that the relationship between mood and productivity is not a always straightforward one, and can depend on the types of jobs people are doing. Mood seems to be a particularly strong driver of performance in tasks that require human interaction and where social and emotional skills play a large role in how productive someone is. These types of jobs make up a growing share of the economy, suggesting that the importance of worker happiness is likely to increase over time.”

The researchers went a step further to test the robustness of their findings, by using data on the amount of windows across the call centres combined with weather conditions – to use differential visual exposure to weather across workers as a form of natural experiment.

They were able to identify trends in mood that correlated with visual weather conditions – with workers reporting lower happiness on gloomy days, particularly in call centres with lots of windows where workers are visually exposed to the changeable patterns of British weather.³

Co-author Clément Bellet, an Assistant Professor at the Erasmus University Rotterdam, explained:

“We made an important contribution to the field by not only directly measuring employee happiness but also isolating the effect of weather exposure on mood using the diverse architecture of BT office buildings. This was a challenging task as past research on weather and mood often assumed the impact of visual exposure without measuring mood directly. By isolating these weather-induced mood shocks, we were able to gain deeper insights into the causal impact of mood on performance in a real-world setting.”

‘[Does employee happiness have an impact on productivity?](#)’ is published in *Management Science*.

1. The survey question, “Overall, how happy did you feel this week?” is based on the [OECD Guidelines on Measuring Subjective Well-being](#) (2013).
2. Oswald, Andrew J., Eugenio Proto, and Daniel Sgroi. “Happiness and productivity.” *Journal of Labor Economics* 33.4 (2015): 789-822.
3. Keller, Matthew C, Barbara L Fredrickson, Oscar Ybarra, Stéphane Côté, Kareem Johnson, Joe Mikels, Anne Conway, and Tor Wager. 2005. “A warm heart and a clear head: The contingent effects of weather on mood and cognition.” *Psychological Science*, 16(9): 724-731.

Available at: <https://wellbeing.hmc.ox.ac.uk/news/productivity-management-science/>